# ATWD XML Update for Services and Validation (Information for TPVS2)

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#### 1 Introduction

This document provides additional information for the ATWD XML API to support the Northern Ireland Protocol (NIP). There is one minor schema change, some new validation rules and additional test data to enable testing of new scenarios.

The TPVS2 test environment will have test data configured which can be used by the third party software vendors to test their software. In particular for NIP, this environment will have the end date of the EU Exit transition period set to 31st December 2019. This will allow tests to be done either side of the exit period. (More details of the test data can be found in section 5.1 Driver Data Set).

#### 2 Schema Changes

A small change will be made to the **ATWDTypeDefinitions.xsd** schema definition to allow the **WarehouseId** simple type to now accept warehouse codes starting with "XI" or "GB":

Change to the Warehouseld type in ATWDTypeDefinitions.xsd to support the new "XI" prefix:

```
<xs:simpleType name="Warehouseld">
  <xs:restriction base="xs:string">
        <xs:pattern value="((GB)|(XI))\d{11}"/>
        </xs:restriction>
</xs:simpleType>
```

#### 2.1 Example XML

Warehouses registered with the new "XI" country prefix for Northern Ireland can then be specified in the warehouse id element for warrants / W1s:

#### **Warehouse Return**

**Example XI warehouse code for W1 (shown in the <warehouseID> element):** 

<WarehouseReturn xmlns="http://www.govtalk.gov.uk/atwd/WarehouseReturn/02
102007"</pre>

#### Warrant

Example XI warehouse code for Warrant (shown in the <warehouseID> element):

<WarrantSubmission xmlns="http://www.govtalk.gov.uk/atwd/WarrantSubmissio"
n/02102007"</pre>

#### 3 Processing and Business Rules Specification

This section covers the main processing and business rules applied to ATWD XML Warehouse Returns (W1s) and Warrants (W5s/W6s) with respect to the updated test data, governing the ultimate submission response and error messages generated by the service for NIP.

#### 3.1 Warehouse Return Submission Validation

## 3.1.1 receiptsFromEU is applicable to NI only post EU Exit transition.

Item	Detail
Rule Title	receiptsFromEU only applicable to NI post EU Exit Rule
Туре	Business Rule
Request Element References	This rule applies to the following elements of the Warehouse Return:  Receipts having a receipt type of receiptsFromEU  warehouseID  periodStartDate
Description	This rule will only be implemented for submissions made by GB mainland warehouses having periods after the EU Exit Transition end date:  • When warehouseID starts with "GB" and periodStartDate is after the EU Exit Transition end date Quantity must be zero for receiptsFromEU
Response Element References	Where this rule fails, the following error message is generated:  ReceiptsFromEU Box is applicable only to NI (1041)

#### 3.1.2 removalsToEU is applicable to NI only post EU Exit transition.

Item	Detail
Rule Title	removalsToEU only applicable to NI post EU Exit Rule
Туре	Business Rule
Request Element References	This rule applies to the following elements of the Warehouse Return:  Removals having a removal type of removalsToEU  warehouseID  periodStartDate
Description	This rule will only be implemented for submissions made by GB mainland warehouses having periods after the EU Exit Transition end date:  • When warehouseID starts with "GB" and periodStartDate is after the EU Exit Transition end date Quantity must be zero for removalsToEU

Item	Detail
Response Element	Where this rule fails, the following error message is generated:
References	RemovalsToEU Box is applicable only to NI (1042)

## 3.1.3 XI prefix expected for NI warehouse returns post EU Exit transition.

Item	Detail
Rule Title	XI prefix expected for NI warehouse returns post EU Exit Rule
Type	Business Rule
Request Element References	This rule applies to the following elements of the Warehouse Return:  • warehouseID  • periodStartDate
Description	This rule will only be implemented for submissions made by NI warehouses having periods after the EU Exit Transition end date:  • warehouseID must start with the new "XI" prefix
Response Element References	<ul> <li>Where this rule fails, the following error message is generated:</li> <li>GB prefix not appropriate for NI Warehouse submissions on or after 01 January 2020 (1043)</li> </ul>

## 3.1.4 GB prefix expected for NI warehouse returns before EU Exit transition.

Item	Detail
Rule Title	GB prefix expected for NI warehouse returns before EU Exit Rule
Туре	Business Rule
Request Element References	This rule applies to the following elements of the Warehouse Return:  • warehouseID  • periodStartDate
Description	This rule will only be implemented for submissions made by NI warehouses having periods on or before the EU Exit Transition end date:  • warehouseID must start with the old "GB" prefix
Response Element References	<ul> <li>Where this rule fails, the following error message is generated:</li> <li>XI prefix not appropriate for submissions before 01 January 2020 (1044)</li> </ul>

#### 3.2 Warrant Submission Validation

## 3.2.1 XI prefix expected for NI warrant submissions post EU Exit transition.

Item	Detail
Rule Title	XI prefix expected for NI warrant submissions post EU Exit Rule
Туре	Business Rule
Request Element References	This rule applies to the following elements of the Warrant Submission:  • warehouseID  • fromDate
Description	This rule will only be implemented for submissions made by NI warehouses having fromDates after the EU Exit Transition end date:  • warehouseID must start with the new "XI" prefix
Response Element References	<ul> <li>Where this rule fails, the following error message is generated:</li> <li>GB prefix not appropriate for NI Warehouse submissions on or after 01 January 2020 (1043)</li> </ul>

## 3.2.2 GB prefix expected for NI warrant submissions before EU Exit transition end.

Item	Detail
Rule Title	GB prefix expected for NI warrant submissions before EU Exit Rule
Туре	Business Rule
Request Element References	This rule applies to the following elements of the Warrant Submission:  • warehouseID  • fromDate
Description	This rule will only be implemented for submissions made by NI warehouses having fromDates on or before the EU Exit Transition end date:  • warehouseID must start with the old "GB" prefix
Response Element References	<ul> <li>Where this rule fails, the following error message is generated:</li> <li>XI prefix not appropriate for submissions before 01 January 2020 (1044)</li> </ul>

#### 4 ATWD Submission Error Specification

The errors shown below are implemented in the current API version. They are documented below for completeness with respect to the reference from the ATWD Submission Validation sections above.

#### 4.1 Warehouse Return Errors

#### 4.1.1 ReceiptsFromEU applicable only to NI

Item	Detail
Error Id (Number)	1041
Error Text (Text)	receiptsFromEU Box is applicable only to NI
Cause	A non-zero Quantity has been declared for a receipt type of "receiptsFromEU" on a declaration for a GB mainland warehouse for a period after the EU Transition End.
Remedial Action	Set the receiptsFromEU to have a quantity of zero (these receipts can be added to one of the other boxes as applicable).
Sample	<pre><errormessage> <errorid>1041</errorid> <errorlocation>/WarehouseReturn/Products/Alcohol[2]/Receipts/Receipt[1]/Quantity<!-- errorLocation--> <errortext>receiptsFromEU Box is applicable only to NI.</errortext> </errorlocation></errormessage></pre>

#### 4.1.1.1 Sample Input XML for the 1041 Error

```
</Quantity>
```

#### 4.1.2 RemovalsToEU applicable only to NI

Item	Detail
Error Id	1042
(Number)	
Error Text (Text)	removalsToEU Box is applicable only to NI
Cause	A non-zero Quantity has been declared for a receipt type of "removalsToEU" on a declaration for a GB mainland warehouse for a period after the EU Transition End.
Remedial Action	Set the removalsToEU to have a quantity of zero (these removals can be added to one of the other boxes as applicable).
Sample	<pre><errormessage>     <errorid>1042</errorid>         <errorlocation>/WarehouseReturn/Products/Alcohol[2]/Removals/Removal[4]/Quantit y</errorlocation></errormessage></pre>

#### 4.1.2.1 Sample Input XML for the 1042 Error

```
<WarehouseReturn xmlns="http://www.govtalk.gov.uk/atwd/WarehouseReturn/02</pre>
102007" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <warehouseID>GB0000000001</warehouseID>
  <periodStartDate>2020-01-01</periodStartDate>
  <periodEndDate>2020-01-31</periodEndDate>
  <currencyCode>GBP</currencyCode>
  <Products>
    <Alcohol>
        <Removals>
        <Removal>
          <alcoholRemovalType>removalsFromEU</alcoholRemovalType>
          <Quantity>
            <cases>10</cases>
            <casks>15</casks>
            <litres>30.0</litres>
          </Quantity>
        </Removal>
        . . .
```

## 4.1.3 XI prefix expected for NI warehouse returns post EU Exit transition

Item	Detail
Error Id (Number)	1043
Error Text (Text)	GB prefix not appropriate for NI Warehouse submissions on or after 01 January 2020
Cause	A submission has been made for an NI warehouse using the "GB" warehouse id for a period after the EU Transition End.
Remedial Action	Change the warehouse id to have the "XI" prefix instead of "GB"
Sample	<pre><errormessage>   <errorid>1043</errorid>    <errorlocation>/WarehouseReturn/warehouseID</errorlocation>     <errortext>GB prefix not appropriate for NI Warehouse submissions on or after 01 January 2020</errortext> </errormessage></pre>

#### 4.1.3.1 Sample Input XML for the 1043 Error

The following XML fragment provides an example of how the submission would look to generate the above error in TPVS2:

```
<WarehouseReturn xmlns="http://www.govtalk.gov.uk/atwd/WarehouseReturn/02
102007" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
        <warehouseID>GB00000000005</warehouseID>
        <periodStartDate>2020-01-01</periodStartDate>
        <periodEndDate>2020-01-31</periodEndDate>
        <currencyCode>GBP</currencyCode>
```

## 4.1.4 GB prefix expected for NI warehouse returns before EU Exit transition

Item	Detail
Error Id (Number)	1044
Error Text (Text)	XI prefix not appropriate for submissions before 01 January 2020
Cause	A submission has been made for an NI warehouse using the "XI" warehouse id for a period before the EU Transition End.
Remedial Action	Change the warehouse id to have the "GB" prefix instead of "XI"

Item	Detail
Sample	<pre><errormessage>   <errorid>1044</errorid>   <errorlocation>/WarehouseReturn/warehouseID</errorlocation>   <errortext>XI prefix not appropriate for submissions before 01 January 2020</errortext> </errormessage></pre>

#### 4.1.4.1 Sample Input XML for the 1044 Error

#### 4.2 Warrant Submission Errors

## 4.2.1 XI prefix expected for NI warrant submissions post EU Exit transition

Item	Detail
Error Id (Number)	1043
Error Text (Text)	GB prefix not appropriate for NI Warehouse submissions on or after 01 January 2020
Cause	A submission has been made for an NI warehouse using the "GB" warehouse id for a period after the EU Transition End.
Remedial Action	Change the warehouse id to have the "XI" prefix instead of "GB"
Sample	<pre><errormessage>     <errorid>1043</errorid>     <errorlocation>/WarrantSubmission/warehouseID</errorlocation>         <errortext>GB prefix not appropriate for NI Warehouse submissions on or after 01 January 2020</errortext> </errormessage></pre>

#### 4.2.1.1 Sample Input XML for the 1043 Error

The following XML fragment provides an example of how the submission would look to generate the above error in TPVS2:

```
<WarrantSubmission
```

```
xmlns="http://www.govtalk.gov.uk/atwd/WarrantSubmission/02102007" xmlns:x
si="http://www.w3.org/2001/XMLSchema-instance"">
```

<warehouseID>GB0000000005</warehouseID>

<DeclarationDetails>

<fromDate>2020-01-01</fromDate>

. . .

## 4.2.2 GB prefix expected for NI warrant submissions before EU Exit transition

Item	Detail
Error Id (Number)	1044
Error Text (Text)	XI prefix not appropriate for submissions before 01 January 2020
Cause	A submission has been made for an NI warehouse using the "XI" warehouse id for a period before the EU Transition End.
Remedial Action	Change the warehouse id to have the "GB" prefix instead of "XI"

Item	Detail
Sample	<pre><errormessage>     <errorid>1044</errorid>     <errorlocation>/WarrantSubmission/warehouseID</errorlocation>     <errortext>XI prefix not appropriate for submissions before 01 January 2020</errortext> </errormessage></pre>

#### 4.2.2.1 Sample Input XML for the 1044 Error

### 5 TPVS2 Testing

#### 5.1 Driver Data Set

To enable testing the following settings will be in place

Setting	Value	Test	Note
EU Exit Transition End Date	31/12/2019	Boundary testing for submissions before or after the EU Exit Transition	W1 submissions for GB mainland warehouses with a period start date will fail with an error if the submission includes non-zero EU receipts / EU removals.
GB Mainland Warehouse 1	GB00000000001	Submissions for GB mainland warehouses	EU receipts / EU removals can only be non-zero on or before the configured EU Exit Transition date
GB Mainland Warehouse 2	GB00000000002	Submissions for GB mainland warehouses	EU receipts / EU removals can only be non-zero on or before the configured EU Exit Transition date
GB Mainland Warehouse 3	GB00000000003	Submissions for GB mainland warehouses	EU receipts / EU removals can only be non-zero on or before the configured EU Exit Transition date
GB Mainland Warehouse 4	GB00000000004	Submissions for GB mainland warehouses	EU receipts / EU removals can only be non-zero on or before the configured EU Exit Transition date
GB NI Warehouse 1	GB00000000005	Submissions using old GB warehouse code for NI warehouses	Warehouse returns / warrant submissions will fail for dates after the configured EU Exit Transition date
GB NI Warehouse 2	GB00000000006	Submissions using old GB warehouse code for NI warehouses	Warehouse returns / warrant submissions will fail for dates after the configured EU Exit Transition date
GB NI Warehouse 3	GB00000000007	Submissions using old GB warehouse code for NI warehouses	Warehouse returns / warrant submissions will fail for dates after the configured EU Exit Transition date
GB NI Warehouse 4	GB00000000008	Submissions using old GB warehouse code for NI warehouses	Warehouse returns / warrant submissions will fail for dates after the configured EU Exit Transition date
NI Test Warehouse 1	XI0000000005	Submissions for NI test warehouses	Submissions will fail for dates before the configured EU Exit Transition date
NI Test Warehouse 2	XI00000000006	Submissions for NI test warehouses	Submissions will fail for dates before the configured EU Exit Transition date

Setting	Value	Test	Note
NI Test Warehouse 3	XI0000000007	Submissions for NI test warehouses	Submissions will fail for dates before the configured EU Exit Transition date
NI Test Warehouse 4	XI00000000008	Submissions for NI test warehouses	Submissions will fail for dates before the configured EU Exit Transition date
GB Mainland Owner 1	GBOG999251363	GB Mainland owner of goods	This owner can be used on any submission.
GB Mainland Owner 2	GBOG999786605	GB Mainland owner of goods	This owner can be used on any submission.
GB Mainland Owner 3	GBOG999113966	GB Mainland owner of goods	This owner can be used on any submission.
GB Mainland Owner 4	GBOG999938707	GB Mainland owner of goods	This owner can be used on any submission.
GB NI Owner 1	GBOG999518764	Old GBOG number for NI owner	This owner can be used on any submission before the configured EU Exit Transition date
GB NI Owner 2	GBOG999914471	Old GBOG number for NI owner	This owner can be used on any submission before the configured EU Exit Transition date
GB NI Owner 3	GBOG999956336	Old GBOG number for NI owner	This owner can be used on any submission before the configured EU Exit Transition date
GB NI Owner 4	GBOG999140251	Old GBOG number for NI owner	This owner can be used on any submission before the configured EU Exit Transition date
NI Owner 1	XIOG999518764	New XIOG number for NI owner	This owner can be used on any submission after the configured EU Exit Transition date
NI Owner 2	XIOG999914471	New XIOG number for NI owner	This owner can be used on any submission after the configured EU Exit Transition date
NI Owner 3	XIOG999956336	New XIOG number for NI owner	This owner can be used on any submission after the configured EU Exit Transition date
NI Owner 4	XIOG999140251	New XIOG number for NI owner	This owner can be used on any submission after the configured EU Exit Transition date

#### **Test Scenarios**

The following table summarises some of the ATWD XML Warehouse Return and Warrant Submission test scenarios which can be executed within TPVS2 with relation to the Northern Ireland Protocol.

Title	Туре	Expected Input	Expected Output
GB Warehouse W1 with non- zero EU receipts / removals for period before EU Exit Transition End date.	Success	<ul> <li>Warehouse Return with:</li> <li>Period Start before 01/01/2020</li> <li>For "GB" warehouse id</li> <li>With non-zero quantity for EU Receipts / EU Removals</li> </ul>	ATWD W1 Declaration Response with:  • Successful acknowledgement number
GB Warehouse W1 with non-zero EU receipts for period after EU Exit Transition End date.	Failure	<ul> <li>Warehouse Return with:</li> <li>Period Start after 31/12/2019</li> <li>For "GB" warehouse id</li> <li>With non-zero quantity for EU Receipts</li> </ul>	ATWD W1 Declaration Response with: Error Code 1041 - ReceiptsFromEU Box is applicable only to NI
GB Warehouse W1 with non-zero EU removals for period after EU Exit Transition End date.	Failure	<ul> <li>Warehouse Return with:</li> <li>Period Start after 31/12/2019</li> <li>For "GB" warehouse id</li> <li>With non-zero quantity for EU Removals</li> </ul>	ATWD W1 Declaration Response with: Error Code 1042 - RemovalsToEU Box is applicable only to NI
GB Warehouse W1 with zero EU receipts / removals for period after EU Exit Transition End date.	Success	<ul> <li>Warehouse Return with:</li> <li>Period Start after 31/12/2019</li> <li>For "GB" warehouse id</li> <li>With zero quantity for EU Receipts/EU Removals</li> </ul>	ATWD W1 Declaration Response with: Successful acknowledgement number

Title	Туре	Expected Input	Expected Output
XI Warehouse W1 with non- zero EU receipts / Removals for period after EU Exit Transition End date.	Success	Warehouse Return with:  Period Start after 31/12/2019  For "XI" warehouse id  With non-zero quantity for EU Receipts /Removals	ATWD W1 Declaration Response with: Successful acknowledgement number
GB Warehouse Warrant Submission with a fromDate after EU Exit Transition End date.	Success	Warrant Submission with:  From Date after 31/12/2019  For "GB warehouse id	ATWD Warrant Submission Response with: Successful acknowledgement number
GB Warehouse Warrant Submission with a fromDate before EU Exit Transition End date.	Success	Warrant Submission with:  • From Date before 01/01/2020  For "GB warehouse id	ATWD Warrant Submission Response with: Successful acknowledgement number
XI Warehouse Warrant Submission with a fromDate after EU Exit Transition End date.	Success	Warrant Submission with:  From Date after 31/12/2019  For "XI warehouse id	ATWD Warrant Submission Response with: Successful acknowledgement number
GB NI Warehouse code used for a W1 for period after EU Exit Transition End date.	Failure	Warehouse Return with:  Period Start after 31/12/2019  Using old "GB" NI warehouse id	Error code 1043 - GB prefix not appropriate for NI Warehouse submissions on or after 01 January 2020
GB NI Warehouse code used for a W1 for period before EU Exit Transition End date.	Success	Warehouse Return with:  Period Start before 01/01/2020  Using old "GB" NI warehouse id	ATWD W1 Declaration Response with: Successful acknowledgement number

Title	Туре	Expected Input	Expected Output
GB NI Warehouse code used for a Warrant Submission with a fromDate after EU Exit Transition End date.	Failure	Warrant Submission with:  • From Date after 31/12/2019  • Using old "GB" NI warehouse id	Error code 1043 - GB prefix not appropriate for NI Warehouse submissions on or after 01 January 2020
GB NI Warehouse code used for a Warrant Submission with	Success	Warrant Submission with:	ATWD Warrant Submission Response with:
a fromDate before EU Exit Transition End date.		• From Date before 01/01/2020	Successful acknowledgement number
		<ul> <li>Using old "GB" NI warehouse id</li> </ul>	
XI NI Warehouse code used for a W1 for period before EU Exit Transition End date.	Failure	Warehouse Return with:  • Period Start before 01/01/2020	Error code 1044 - XI prefix not appropriate for submissions before 01 January 2020
		Using new "XI"     NI warehouse     id	
XI NI Warehouse code used for a Warrant Submission with a fromDate before EU Exit Transition End date.	Failure	Warrant Submission with:  From Date before 01/01/2020  Using new "XI" NI warehouse id	Error code 1044 - XI prefix not appropriate for submissions before 01 January 2020